



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Advisory Circular

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**Subject: AGING AIRPLANE RECORDS  
REVIEW AND INSPECTIONS**

**Date: / /99  
Initiated By: AFS-304**

**AC No: 120-XX  
Change:**

- 1. PURPOSE.** This advisory circular (AC) provides guidance pertaining to aging airplane records review and inspections that are accomplished to satisfy the requirements of the final rule “Aging Airplane Safety,” which was enacted in response to a statutory requirement by Congress in the “Aging Aircraft Safety Act of 1991.”
- 2. EFFECTIVE DATE.** [Date of publication of the “Aging Airplane Safety” final rule]
- 3. FORMS AND REPORTS.** Federal Aviation Administration (FAA) Form XX–X, Result of Aging Aircraft Inspection (in accordance with Title 14 of the Code of Federal Regulations (14 CFR) section 121.368, 129.20, or 135.422).
- 4. DEFINITIONS.** For the purposes of this AC, the following definition applies: Years in-service. The calendar time elapsed since an airplane was issued its first U.S. or first foreign airworthiness certificate.
- 5. RELATED READING MATERIAL.**
  - a.** FAA Order 8300.10, Airworthiness Inspector’s Handbook.
  - b.** Flight Standards Handbook Bulletin HBAW 96-01, Information and Guidance Pertaining to Structural Programs for Aging Large Transport and Other Transport Category Airplanes.
  - c.** AC 91–56A, Continuing Structural Integrity Program for Large Transport Category Airplanes.
  - d.** AC 91–XX, Continued Airworthiness of Older Small Transport and Commuter Airplanes; Establishment of Supplemental Inspection Programs.

**6. BACKGROUND.**

**a.** To address aging aircraft concerns, in October 1991, Congress enacted Title IV of Public Law 102–143, known as the “Aging Aircraft Safety Act of 1991,” which was subsequently codified as 49 U.S.C., section 44717. The law instructed the Administrator to prescribe regulations that would ensure the continuing airworthiness of aging aircraft. The law also instructed the Administrator to conduct inspections and review the maintenance and other records of each aircraft an air carrier uses to provide air transportation. These inspections and records review were intended to enable the Administrator to decide whether aging aircraft are in a safe condition and maintained properly for operation in air transportation. The law also required the Administrator to establish procedures to be followed for performing such inspections.

**b.** In addition to imposing obligations on the Administrator, the law stated that air carriers must demonstrate that the maintenance of their aircraft’s age-sensitive parts and components has been adequate and timely, and operators must make their aircraft and aircraft records available for inspection.

**c.** As a result of these statutory requirements, the FAA published on [date of publication of final rule] (xx FR xxxxx), a final rule titled “Aging Airplane Safety” that specifies mandatory aging aircraft inspections for certain airplanes according to their time-in-service, as well as requirements for damage-tolerance-based inspections and procedures to be included in the maintenance or inspection programs of certain airplanes. The rule also prohibits operation of those airplanes after specified deadlines unless damage-tolerance-based inspections and procedures are included in the maintenance or inspection programs under which the airplanes are maintained. This requirement was implemented to ensure the continuing airworthiness of aging airplanes operated in air transportation by assessing the damage tolerance of older airplane structures. Finally, the rule permits certain representatives of the Administrator to conduct the aging airplane inspections.

**7. GENERAL PROVISIONS OF THE “AGING AIRPLANE SAFETY” RULE REGARDING AGING AIRCRAFT RECORDS REVIEW AND INSPECTIONS.**

**a. Rule Requirements.** The “Aging Airplane Safety” rule requires all airplanes operated under 14 CFR part 121 of all U.S.-registered multiengine airplanes operated under 14 CFR part 129, and all multiengine airplanes used in scheduled operations under 14 CFR part 135 to undergo records review and inspections by the Administrator after their 14th year in-service to ensure that the maintenance of their age-sensitive parts and components has been adequate and timely.

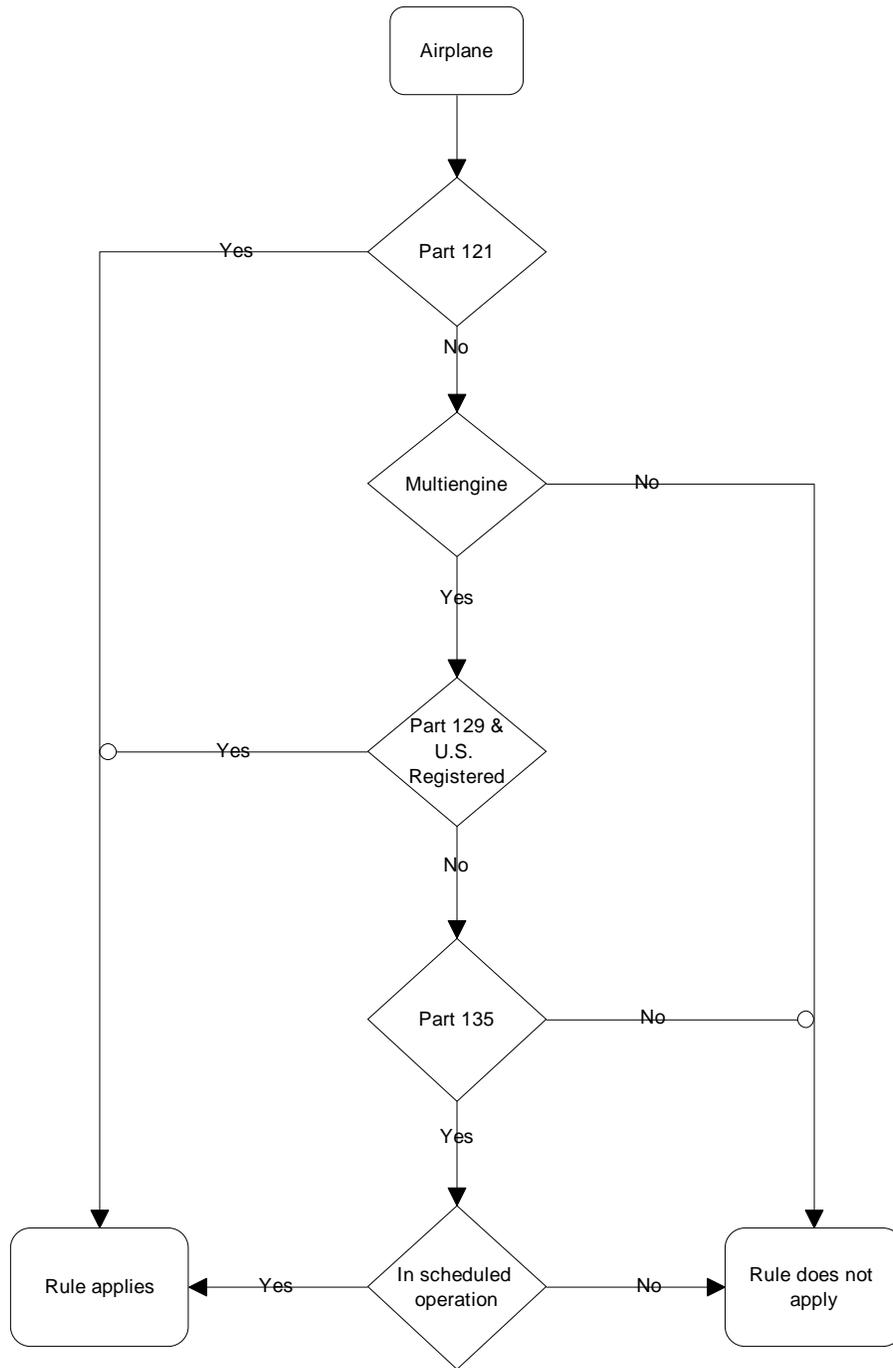
**b. Airplanes and Operations Affected.** To facilitate the determination of which airplanes must undergo records review and inspections required by the “Aging Airplane

Safety” rule, the operator may use figure 1, titled “Operator Decision Logic Applicability of the Records Review and Inspections.” If an airplane is operated under part 121, then section 121.368 applies. Multiengine airplanes operated under part 129 and smaller airplanes operated under part 135 may also be subject to the “Aging Airplane Safety” rule. If the airplanes are U.S.-registered and operate under part 129, then section 129.20 applies. Airplanes in scheduled operations under part 135 must comply with section 135.422. Airplanes not conducting operations under these parts of the Regulations are not subject to aging airplane records review and inspections.

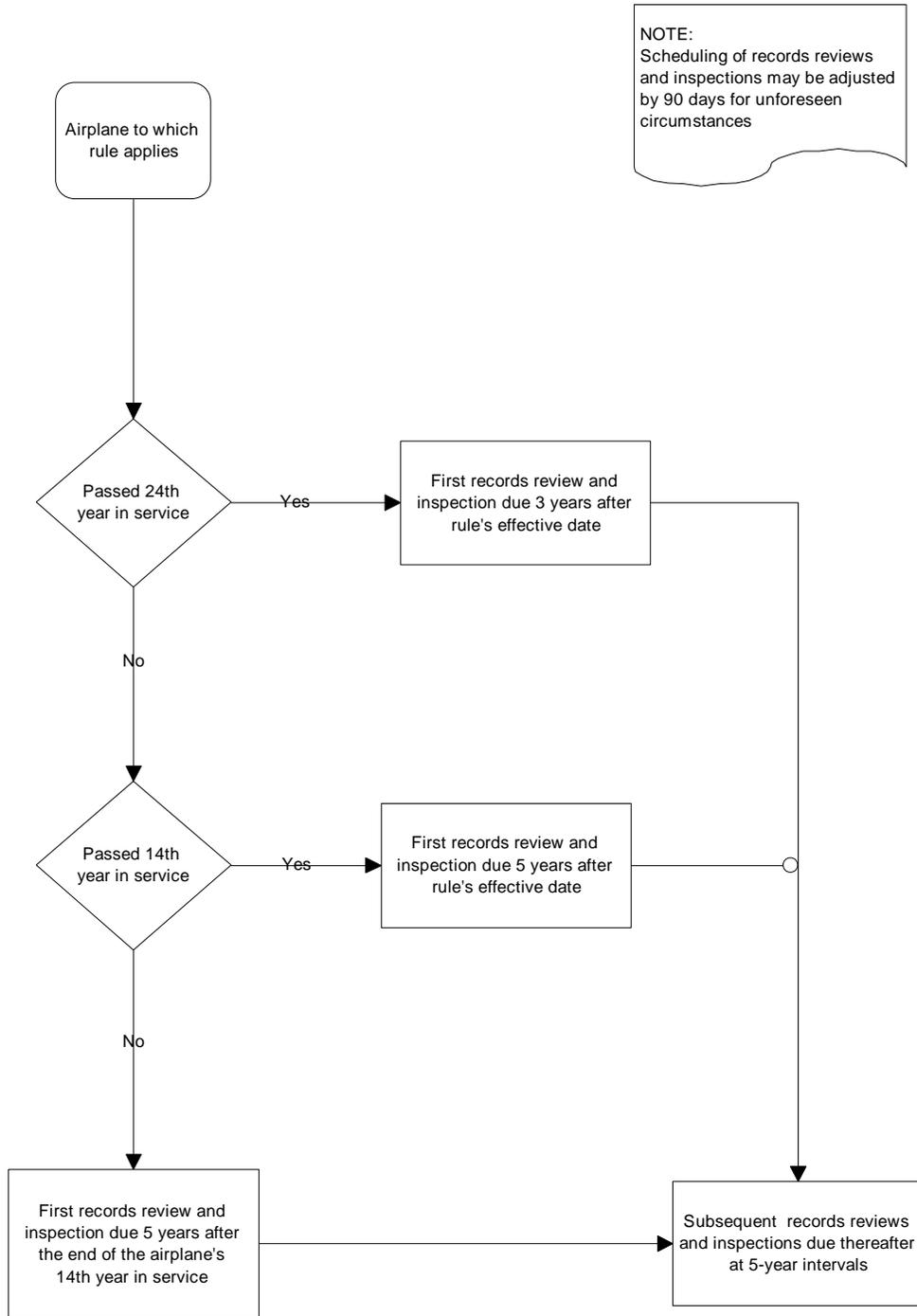
**c. Records Review and Inspections.** When the operator has determined which of its airplanes are affected by the “Aging Airplane Safety” rule, the operator should refer to the decision logic flowchart in figure 2. Although the aging airplane records review and inspections are only required after an affected airplane’s 14th year in-service, the rule specifies that airplanes that have passed their 24th year in-service must be inspected within 3 years after [the effective date of the rule] to ensure that the oldest airplanes are inspected first and to distribute the workload for the initial inspections. The airplanes that have passed their 14th year in-service but not their 24th year must be inspected within 5 years after [the effective date of the rule.] Airplanes that have not passed their 14th year in-service must have their first aging airplane records review and inspection within 5 years after the end of their 14th year in-service. In all cases, subsequent records review and inspections are required at 5-year intervals after the initial records review and inspection. The rule prohibits operators from operating an affected airplane unless it has undergone the required records review and inspection. This applies only to airplanes conducting operations under the applicable parts of the rule. For example, an operator could still fly the airplane under a different type of operation, such as 14 CFR parts 91 or 125.

**d. Extensions.** As specified in the “Aging Airplane Safety” rule, the Administrator may approve 90-day extensions on the thresholds and repeat intervals of aging aircraft records review and inspections to accommodate unforeseen scheduling conflicts. The operator should submit the request for an extension to the Principal Maintenance Inspector (PMI) along with justification for the extension.

**Figure 1: Operator Decision Logic  
Applicability of the Records Review and Inspections**



**Figure 2: Operator Decision Logic  
Initial Records Review and Inspections Due Date**



## **8. CONDUCT OF AGING AIRCRAFT RECORDS REVIEW AND INSPECTIONS.**

**a.** This information represents an acceptable way, though not the only way, for an aging aircraft records review and inspection to be conducted.

**b.** Procedure for notifying the FAA that an airplane is due for an aging aircraft records review and inspection. An operator should provide written notification to its PMI 60 days before the date an airplane will be made available for a records review and inspection. A single notification can be used to cover one or several aircraft. However, the notice should identify all airplane(s), and the date that they are scheduled to be inspected. This information should be provided 60 days before any airplane will be inspected. It may be preferable for operators to schedule records review and inspections early, especially if the airplane will already be undergoing scheduled “heavy” maintenance. The operator should submit the aircraft make, model, serial number, registration number, location where the inspection will take place, and planned date of inspection. The operator also should ensure that the records specified in section 121.368(d), 129.20(d), or 135.422(d), as applicable, will be available at the aircraft’s location to permit the records review to be accomplished at the same time as the aircraft inspection.

**c. Aircraft Inspections.** For the Administrator to fulfill his or her obligation to ensure that air carriers demonstrate that the maintenance of age sensitive parts and components has been adequate and timely, the inspections and records review will focus on existing aging aircraft requirements. These requirements consist of aging aircraft structural modifications, corrosion prevention and control programs, supplemental structural inspections programs (including airworthiness limitations inspections), and structural repair requirements. Although the FAA’s inspection will focus on aging aircraft requirements, inspections also will be based on the review of all the records required by the rule. In addition, the FAA will conduct the inspection required by the rule primarily on those parts of the aircraft that are accessible while it is undergoing scheduled heavy maintenance. The FAA may require additional access to the airplane based on its records review and findings.

### **d. Required Records.**

(1) As required in sections 121.368(d), 129.20(d), and 135.422(d), the following records should be available with the airplane for the aging aircraft records review and inspection:

- (i) Total years in-service;
- (ii) Total flight hours of the airframe;
- (iii) Total flight cycles of the airframe;

- (iv) Date of the last aging aircraft records review and inspection;
- (v) Current status of life-limited parts of the airframe;
- (vi) Time since the last overhaul of all structural components required to be overhauled on a specific time basis;
- (vii) Current inspection status of the airplane, including the time since the last inspection required by the inspection program under which the airplane is maintained;
- (viii) Current status of the following, including the method of compliance;
  - (A) Airworthiness directives;
  - (B) Corrosion Prevention and Control Programs; and
  - (C) Aging aircraft supplemental inspections.
- (ix) A list of major structural alterations; and
- (x) A report of major structural repairs and the current inspection status for those repairs.

(2) The aging aircraft supplemental inspections. The “Aging Airplane Safety” rule establishes that each affected airplane will be prohibited from operating unless damage-tolerance-based inspections and procedures are included in the maintenance or inspection program for each airplane in accordance with a specified schedule. Damage-tolerance-based inspections and procedures are required on all affected airplanes no later than December 20, 2010. Although the rule specifies dates by which damage-tolerance-based inspections and procedures are required to be developed and incorporated into the operator’s approved maintenance or inspection program, the program may not require inspections to be completed until a later date. That date depends on the damage-tolerance assessment of the airplane’s structure. Each aging aircraft records review and inspection will require verification that the mandatory damage-tolerance-based inspections and procedures specified in section 121.212, 129.16, or 135.168, as applicable, have been established.

(3) Additional information. In addition to the records listed, the FAA inspectors or designees of the Administrator who perform the records review and inspection also may need to verify current status information. Therefore, the status records should be available at the same location the airplane inspection will take place.

**9. DESIGNATED AIRWORTHINESS REPRESENTATIVES.** As specified in 14 CFR part 183, the Administrator may designate individuals to act on his or her behalf to conduct functions that are normally accomplished by the FAA. The “Aging Airplane Safety” rule revised section 183.33(a) to expand the authority of the Designated Airworthiness Representative (DAR) by authorizing him or her to conduct records review and inspections on behalf of the Administrator. Although it may be preferable for operators to have their required aging aircraft records review and inspections performed by the FAA, operators may have the records review and inspections performed by a DAR.

**10. COMMENTS INVITED.** Comments regarding this AC should be directed to the Continuous Airworthiness Maintenance Division, AFS-300, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267-7355.

**11. APPENDIX.** FAA Form XX-X, Result of Aging Aircraft Inspection (in accordance with 14 CFR section 121.368, 129.20, or 135.422).

L. Nicholas Lacey  
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Service

APPENDIX.

 <p>U.S. Department of Transportation <b>Federal Aviation Administration</b></p>		<p><b>RESULT OF AGING AIRCRAFT INSPECTION</b> (in accordance with 14 CFR § 121.368, 14 CFR § 129.20, or 14 CFR § 135.422)</p>		<p>Form Approved OMB No. XXXX</p>
<p>INSTRUCTIONS: Print or type all entries.</p>				
1. Aircraft	Make		Model	
	Serial No.		Registration Mark	
2. Operator	Name		Address	
	Certificate No.			
<p>3. Completion of records review and airplane inspection</p>				
<p>A. The records review and airplane inspection have been completed in accordance with the following CFR:</p> <p style="text-align: center;"> <input type="checkbox"/> § 121.368                      <input type="checkbox"/> § 129.20                      <input type="checkbox"/> § 135.422                 </p>				
<p>B. Have discrepancies been identified during this inspection?</p> <p style="text-align: center;"> <input type="checkbox"/> Yes (see C. below)                      <input type="checkbox"/> No (see D. below)                 </p>				
<p>C. Have a list of discrepancies been provided to the aircraft operator?</p>			<input type="checkbox"/> Yes	<input type="checkbox"/> No
<p>D. Pursuant to the authority given to me by the Administrator, I certify that this aircraft was inspected in a manner prescribed by the Administrator of the Federal Aviation Administration.</p>				
	FAA Flight Standards Inspector			FAA Designee
Name			Certificate or Designation No.	
Signature of Authorized Individual			Date	

FAA Form XX-X

